

Argus Butadiene

Formerly Argus DeWitt Butadiene

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HIGHLIGHTS

- The US crude C4 market tightens as cracker outages persist.
- European raffinate-1 spot demand holds firm as supply constraints continue.
- BD prices in Asia-Pacific edge down for the first time this year.
- Potential interest in European-origin deep sea BD imports grows among North American consumers.

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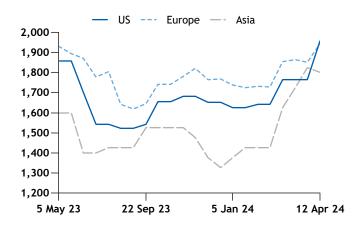
MARKET SNAPSHOT

Key prices			
	Timing	Price	±
Americas			
Butadiene contract fob ¢/lb		49.00-50.00	0.00
Butadiene prevailing contract fob ¢/lb	Apr	50.00	0.00
Europe			
Butadiene contract delivered €/t	Apr	940.00	0.00
Asia-Pacific			
Butadiene spot cfr NE Asia \$/t		1,450.00-1,500.00	-50.00

Global SBR			\$/t
	Timing	Price	±
US eSBR 1502	Apr	1,890-2,023	+193
Europe eSBR 1502	Apr	1,922-1,965	+94
Asia eSBR 1502		1,750-1,850	-25

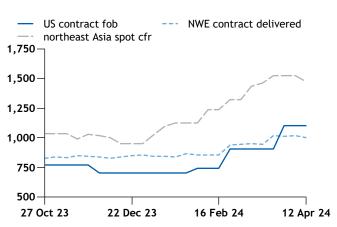
Associated markets			\$/t
	Timing	Price	±
TSR20 SGX fob	May	1,618.00-1,640.00	+4.50
Naphtha 65 para NWE cif		684.00	-21.25
Naphtha Japan c+f		703.13	-8.62

Global SBR



Butadiene: Americas, Europe and Asia

\$/t



\$/t

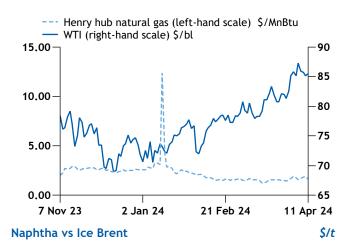
ENERGY AND FEEDSTOCKS

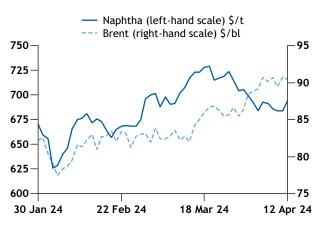
WTI crude futures fell on rising US stockpiles and speculation the Federal Reserve may delay the start of its expected interest rate-cutting cycle due to stubbornly high inflation. May Nymex WTI fell by \$1.19/bl to \$85.02/bl while June Ice Brent fell by 74¢/bl to \$89.74/bl. The June Brent-June WTI spread widened to \$5.29/bl.

US crude inventories last week rose by 5.8mn bl to an eight-month high as exports continued to slide, the Energy Information Administration (EIA) reported Wednesday. Crude stocks across the US came in at 457.3mn bl in the week ended 5 April, up from 451.4mn bl a week earlier and the highest since the week ended 14 July 2023.

The oil market has paused for breath this week after prices reached a six-month high on escalating tensions in the Middle East. Any retaliation by Iran against Israel for a suspected attack on its diplomatic mission in Damascus could push oil prices even higher.

Henry Hub natural gas vs WTI

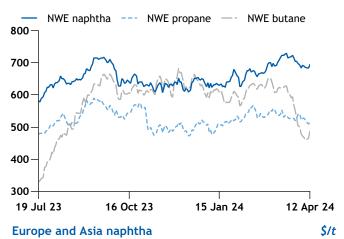


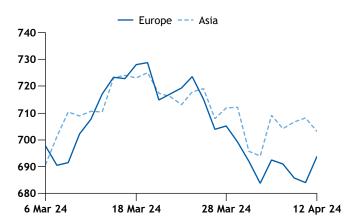


Market prices			
	Timing	Price	±
Americas, 11 Apr			
Natural gas Houston Ship Channel All Index \$/mmBtu		1.33	-0.01
Ethane Mont Belvieu spot fob ¢/USG		19.25	0.00
Propane Mont Belvieu spot fob ¢/USG		78.88	-5.62
Butane Mont Belvieu spot fob ¢/USG		95.9	-15.00
Naphtha 40 N+A USGC delivered ¢/USG		187.41	-4.51
Gasoline 87 conv USGC ¢/USG		266.29	-0.26
Gasoline 93 conv USGC ¢/USG		305.04	-0.26
Nymex WTI \$/bl		85.02	-1.57
WTI \$/bl		85.02	-1.57
Europe, 11 Apr			
Propane cif ARA large cargo \$/t		509.00	-17.00
Butane ARA/UK large cargo \$/t		512.75	-5.25
Naphtha 65 para NWE cif \$/t		684.00	-21.25
Ice Brent \$/bl	Jun	90.15	+3.24
Asia-Pacific, 11 Apr			
Naphtha Japan c+f \$/t		703.13	-8.62
Butane Argus Far East Index™ \$/t		618.25	+4.00
Propane Argus Far East Index™ \$/t		607.25	+2.00

European cracker feedstock prices

\$/t





ENERGY AND FEEDSTOCKS

US natural gas futures tumbled on a government report showing a larger-than-expected build in gas inventories and on forecasts for mild weather in the coming weeks. Nymex gas for May delivery at the Henry Hub dropped by 12.1¢/mmBtu, or 6.4pc, to settle at \$1.764/mmBtu. The 12-month strip declined by 1.4pc to \$2.79/mmB-

tu, while the 2025-calendar strip was up by 0.4pc to \$3.50/mmBtu.

US gas storage sites have entered the spring shoulder season flush with supply on robust gas production and a mild winter. Injections usually resume during April as the weather warms and weather-related demand declines.

AUTO UPDATE

Americas

US sales of light vehicles edged down to a seasonally adjusted rate of 15.5mn in March. Sales of light vehicles — trucks and cars — fell from a seasonally adjusted rate of 15.7mn units in February, the Bureau of Economic Analysis reported. Rates this year have sat below December's 16.1mn showing, which was the most since May 2021.

Auto production increased to a seasonally adjusted rate of 142,500 in February from 133,800 in January. Auto assemblies are reported with a one-month lag to sales.

Tesla's deliveries declined by 8.5pc from a year earlier after a series of planned and unplanned disruptions. Electric vehicle (EV) shipments fell to 386,810 vehicles in the first quarter of 2024 from 422,875 vehicles in the first quarter of 2023. The company attributed the declines to planned disruptions like increasing production of the updated Model 3 alongside unplanned issues like unrest in the Red Sea shipping lanes.

Brazil's vehicle production fell by 11pc in March from a year earlier, thanks to higher imports and lower exports. The country produced approximately 195,800 units in March, down from nearly 221,800 a year before, according to the Brazil's vehicle association Anfavea.

Brazil exported around 32,700 units in March, down by 28pc from the same period last year and up by 6.5pc from February. Argentina is the main destination for Brazil's exports, followed by Mexico and Uruguay.

Europe

UK electric vehicle (EV) sales rose in March on firms' resurging demand for fleet cars, despite a drop in private car sales on the year earlier, data from the Society of Motor Manufacturers and Traders (SMMT) show.

Sales of hybrid EVs (HEVs), plug-in hybrid EVs (PHEVs) and battery EVs (BEVs) all rose last month, although demand for cars across the board continues to be driven by firms' fleet

sales — up by 29.6pc on the year — while consumer sales fell by 7.7pc.

Total private car sales in March slipped to 128,472 from 139,223, but fleet car sales jumped to 181,399 from 140,002 a year earlier. This has lifted total new car registrations in March to 317,786 from 287,825 in March last year — the highest since 2019, although still well short of pre-pandemic sales.

New German EV registrations in March rose to the highest so far this year. EV registrations in March rose by 3,905 on the month to the highest so far this year 31,384 but declined by 28.9pc on the year to the lowest for any March in the past three years, according to motor transport authority KBA.

A total of 263,810 new cars were registered in March, up by 46,435 on the month and the highest since August last year.

French registrations of new EVs were up on the year in March, reaching their highest so far in 2024, environmental transition ministry data show. French EV sales rose by 12pc on the year to 34,792 units last month and increased by 32.8pc on the month. Their market share out of total vehicle sales was up by one percentage point on the month to 19pc.

Sales of plug-in hybrid vehicles recorded a slower increase, up by 3.6pc on the year to 16,379 units, also their highest since the start of the year. Their share of total registrations rose by 0.9 percentage points from February to 8.9pc.

France had more than 118,000 public charging stations for EVs as of the end of December last year, EV industry association Avere-France's data show. And more than 1.5mn electric and plug-in hybrid vehicles were on French roads in 2023. The country aims to increase this to 2mn EVs by 2030.

Asia-Pacific

Major Chinese new energy vehicle (NEV) manufacturer BYD recorded much higher output and sales on the year and on the month in March driven by a round of promotion campaigns, including price cuts.



AUTO UPDATE

Output and sales rebounded in March following falls in February caused by the lunar new year holiday. BYD's NEV sales soared by 46pc from a year earlier and by nearly 1½ times from February to 302,459 units in March, including 828 commercial NEVs and 301,631 passenger NEVs.

BYD began to cut prices for some NEV models to boost sales after the 10-17 February lunar new year holiday, with many of its domestic NEV counterparts following suit by reducing prices to attract orders.

Japan's domestic automobile production fell in February, mostly because of limited operations at carmaker Daihatsu, marking two consecutive months of year-on-year declines.

Total passenger vehicle output fell to 586,007 units, down by around 16pc from a year earlier. But the downtrend could ease in March. Japan's overall industrial output index for March is expected to grow by 4.5pc from the previous month, Meti said, mostly because of a recovery in automobile output.

Japanese sales of domestic passenger EVs fell against a year earlier with weaker demand and possible reduced output. Sales totaled 7,462 units in March, down by 22.5pc from a year earlier, according to preliminary data from industry groups.

The fall in domestic EV sales is in line with global down-trend in the EV market. But lower sales in March could also have been because of reduced domestic auto output in January and February. Some car manufacturers struggled to secure automotive components in the aftermath of an earthquake that hit north-central Japan in January, according to a trade and industry (Meti) ministry official. Snowfall in early February also forced some auto manufacturers to suspend output.

ECONOMIC UPDATE

Americas

The US added a more-than-expected 303,000 nonfarm jobs in March and the jobless rate ticked lower, more signs the labor market remains robust in the face of higher borrowing costs. The unemployment rate fell to 3.8pc in March from 3.9pc the prior month.

Futures markets showed about a 53pc probability of rate cuts beginning in June after the report was released, compared with about 66pc odds prior to the report. Federal Reserve chair Jerome Powell reiterated that policymakers needed "greater confidence" inflation was sustainably slowing before beginning to cut the Fed target rate, currently at a 23-year high.

The US manufacturing sector expanded in March for the time since September 2022, on positive demand and stronger output. The manufacturing purchasing managers' index (PMI) expanded to 50.3 in March, up from the 47.8 recorded in February, according to the Institute for Supply Management's (ISM) monthly survey. The 12-month average was 47.5.

Readings above 50 signal growth while those below that level signify contraction.

Mexico's manufacturing activity grew in March, recording the strongest monthly rebound in seven years, the Mexican Institute of Finance Executives' (IMEF) manufacturing index showed. The IMEF manufacturing indicator increased by 4.3 points to 54.5 points in March, following three months of tracking just above or below the 50-points threshold marking expansion and contraction.

The IMEF noted that despite the March rebound, the mixed trend in the first quarter "could point to less dynamism in the industry." Inventories rose sharply by 10.5 points to 58.8 units.

Europe

The eurozone's manufacturing sector continued to contract in March, although positive indicators including the indices for output and new orders continued recent upward trajectories.

The Hamburg Commercial Bank (HCOB) eurozone manufacturing purchasing managers' index (PMI) reading, compiled by S&P Global, moved further into negative territory in March, at 46.1 — down from 46.5 in February — and growth expectations remained weak, weighing on factory employment. But the manufacturing output index improved to 47.1 from 46.6 in February, the highest for 11 months, and the rate of reduction in new orders eased for a fifth consecutive month.

The UK's manufacturing sector showed signs of recovery in March, as output and new orders increased following year-long downturns. The UK's manufacturing PMI increased to 50.3 in March from 47.5 in February.

German manufacturing output stepped up for a second consecutive month in February, pointing to a bottom forming throughout the country's continued economic slump, the econ-



ECONOMIC UPDATE

omy ministry (BMWK) said. German manufacturing production rose by 2.1pc from January, adjusted for seasonal and calendar effects. This was driven by strong 4.6pc growth in output from the chemicals industry, as well as increases in the construction sector and the pharmaceutical industry by 7.9pc and 6.4pc, respectively.

The index for energy-intensive industrial sectors has risen more steeply than non-energy segments in recent months. It was up by 4.2pc on the month and by 0.9pc on the year in February.

That said, underlying data from German statistical office Destatis show a 0.5pc reduction in manufacturing output in December-February from the previous three-month period. And output fell by 4.9pc from February 2023.

Asia-Pacific

China will face countermeasures from the US and other major industrial economies unless Beijing addresses over-capacity in manufacturing electric vehicles (EVs), lithium-ion batteries and solar panels, US treasury secretary Janet Yellen said.

Yellen noted that China's over-capacity in manufacturing steel hurt the US and European industries a decade ago. The

EU, Japan, Mexico and India share the US' concerns, she said.

Chinese premier Li Qiang told Yellen on Sunday that the US should take an "objective and dialectic" view of China's green industrial capacity. "The development of China's new energy industry will contribute significantly to the green and low-carbon transition worldwide," Li said. "China is ready to strengthen policy coordination with the US on climate change and other issues to jointly address global challenges."

China's manufacturing purchasing managers index (PMI) rose to 50.8 in March, up by 1.7 percentage points from February, indicating a rebound in manufacturing activities.

The index had remained in contraction for five consecutive months before March and had been below 50 — the boundary indicating expansion or contraction — for nine months in the past 12 months, data from the National Bureau of Statistics (NBS) show.

The manufacturing PMI usually picks up in March, as warm weather allows for more construction activities, and employees return to work and factories resume operations after the long lunar new year holiday. But the index's performance in March still surpassed market expectations, and the extent to which it rebounded was higher than usual.

AMERICAS

Markets

US butadiene (BD) supply is set to tighten through most of the second quarter as producers enforce controls on term volumes and demand levels hold firm.

Up until this week, some BD buyers were anticipating a mild easing of supply side constraints from US producers moving forward. However, sources confirmed that one producer with no recorded allocations to date this year plans a 35-day turnaround sometime in May. Without relief from other producers, the domestic market is expected to tighten further next month.

A producer with a BD asset in Louisiana faces continued technical challenges, impacting the on-site cracker and BD unit at least till the end of April. A separate Texas-based supplier is likely to extend its allocation for an additional month or more, according to sources. A delay to a cracker restart in Louisiana has tightened the crude C4 market.

No spot deals or firm bids and offers were reported. We moved the spot range to 49-54e/lb, up 3e/lb from the last

Americas prices			¢/lb
	Timing	Price	±
Butadiene US contract fob		49.00-50.00	0.00
Butadiene US prevailing contract fob	Apr	50.00	0.00
Butadiene US spot fob		49.00-54.00	+1.50
Butene-1 US domestic fob	Mar	76.00-81.00	+4.00
Isobutylene 99% pure US fob	Mar	64.00-69.00	+1.00
Raffinate-1 (45% iC4=) US formula		60.70-61.40	+1.70
Crude C4 spot USGC cif		997.00-1,089.00	+21.50

assessment, on tight supply and more discussion around deep sea imports.

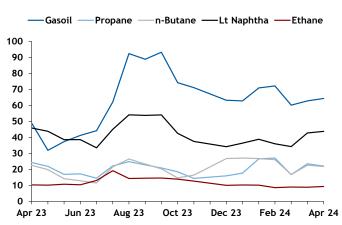
There were ideas about one or two potential exports from Europe to North America. If accomplished, this may support strong price appreciation for the May US CP. Buyers would need to pay at least 60¢/lb to attract imports from Europe.

In logistics, the Panama Canal Authority (ACP) announced temporary restrictions on daily vessel transits between 7-14



AMERICAS





May. Maintenance for the Panamax locks will result in fewer transit availabilities for two medium range tankers and Supramax bulkers and one less slot for smaller vessels. The ACP holds a long-term view that forecasted rainfall will relax restrictions and facilitate a return to normalcy by 2025.

Further upstream, the US Energy Information Administration (EIA) expects the first drop in natural gas output since 2020 as producers plan production curtailment. Total gas inventories remained 39pc above the five-year average as of 29 March. High inventories have capped natural gas prices even with demand supported by lingering cold weather. Large producers therefore pledged to cut production this year.

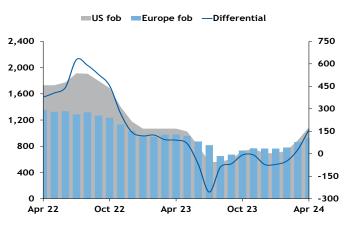
Henry Hub natural gas prices on a day-ahead basis have risen month-over-month. The month to date April average is \$1.727/mmBtu, an increase from the March average of \$1.487/mmBtu. On 10 April, *Argus* assessed Henry Hub on a day-ahead basis at \$1.855/mmBtu.

TPC Group will expand its butadiene (BD) capacity by 17pc in the third quarter of this year, returning capacity to 2019 levels, before one of its BD plants was shut down after an explosion. The Texas-based company's expansion at its Houston plants will add another 75,000 t/yr of BD capacity, pushing it to 497,000 t/yr from 422,000 t/yr, chief executive Ed Dineen told *Argus* last week during an exclusive interview on the sidelines of the AFPM conference in San Antonio, Texas. This is on top of earlier capacity expansions last year.

TPC will process nearly 20pc more crude C4 this year than it did in 2019, when the company permanently closed its 425,000 t/yr BD plant in Port Neches, Texas, following the

US vs Europe butadiene contract, fob basis

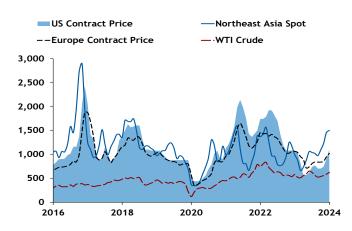
¢/lb



Global butadiene price history, 2016-present

\$/t

\$/t



November 2019 explosion. After closing the Port Neches plant, TPC entered a third-party crude C4 processing agreement with BASF-Total Petrochemicals (BTP). The agreement started in early 2021 when TPC supplied crude C4 to BTP and received the BD and raffinate-1 streams in return.

In industry, President Joe Biden's administration established a new ruling to reduce toxic air emissions at about 200 petrochemical plants that produce synthetic organic chemicals and a variety of polymers and resins. The rule requires plants to cover costs worth \$522mn on equipment and \$194mn/yr in recurring expenses. The Environmental Protection Agency (EPA) said that implementation will avoid nearly 24,000 t/yr of air pollutants such as benzene, vinyl chloride and 1,3-butadiene.

EUROPE

Markets

Butadiene (BD) faces continued supply constraints as European producers deal with unplanned outages. There have been ongoing production issues in France, Italy, the Netherlands, and Portugal.

Demand levels in Europe are expected to hold steady, if not rise, despite market conditions squeezing margins further downstream. The tire segment remains a leading source of demand for BD. Trade barriers have reduced Russian synthetic rubber imports into the region, and strained logistics in the Red Sea have slowed down derivative imports from Asia-Pacific.

BD spot interest has held firm. A domestic BD spot deal was reported last week for April loading at a 6pc premium to the monthly contract price (MCP), totaling 1,500t. A separate bid was placed at a discount to the MCP in the same timeframe.

Traders have also made spot inquiries. While the import appetite from Asia-Pacific has waned, there is potential buying interest from North America. To open an arbitrage opportunity, a consumer would have to pay at least \$1,325/t, which is a healthy premium compared to the April US *Argus* prevailing contract price at \$1,102/t.

A crude C4 deal was reported last week for April loading, which totaled 6,400t, at a factor of 1.02 times naphtha. The price level is lower than the previous assessment, likely because of the large quantity. Other discussions were between 1.06 to 1.08 times naphtha.

Three raffinate-1 deals were done for April loading at around 9,000t. All traded at a factor of 1.49 to 1.51 times naphtha, which moves the range up from last month. Blending margins improved this week, supporting demand for gasoline components.

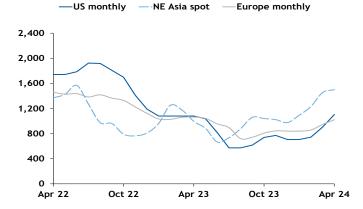
In feedstocks, European naphtha averaged \$690.7/t month to date in April, down \$19.1/t from the March average at \$709.8/t. On 9 April, *Argus* assessed European naphtha at \$685.7/t. Falling naphtha prices this week draws on weakening demand and a slight uptick in imported petrochemical products. Other feedstocks, namely propane and butane, hold a cost advantage to naphtha for steam cracking in Europe.

In energy, Dutch TTF natural gas prices on a day-ahead basis dipped lower month-over-month. The month to date April average is € 26.61/MWh, marking a decline from the March average at €26.71/MWh, according to *Argus* data. On 9 April, *Argus* assessed TTF on a day-ahead basis at €27.3/MWh.

Europe prices			
	Timing	Price	±
Butadiene NWE contract delivered €/t	Apr	940.00-940.00	0.00
Butadiene NWE formula netback fob US $\$/t$		733.00-843.00	-17.00
Isobutylene NWE delivered €/t	Mar	1,110.00-1,140.00	+65.00
Raffinate-1 NWE incremental cfr \$/t		1,018.00-1,034.00	-19.50
Naphtha factor \$/t		1.49-1.51	0
Crude C4 NWE spot dlvd USGC \$/t		697.00-739.00	-28.50
Naphtha factor \$/t		1.02-1.08	-0.01

Global butadiene prices

\$/t



On 11 April, Exxon announced the closure of its French chemical unit at Gravenchon in Port-Jerome-sur-Seine by this year. The site - which has a capacity of 400,000 t/yr of ethylene, 290,000 t/yr of propylene and butadiene production - has operated losses of more than €500mn (\$540mn) because of high operating and energy costs, the company said.

Sabic plants to shut down one steam cracker, Geleen 3, at its petrochemical site in the Netherlands starting this week. The nameplate capacity of the cracker is 550,000 t/yr of ethylene, 260,000 t/yr of chemical grade propylene and butadiene production. The steam cracker at Sabic's Wilton site in Teesside, UK, will re-start production in the future, with plans to convert it to 100pc ethane feedstock.

That said, Borealis earmarked €4.5mn (\$4.9mn) worth of investments at its Porvoo site in Finland, impacting three cracker furnaces in the company's olefins unit. The upgrades, set for completion by 2025, will produce 120,000 t/yr of base chemicals from recyclable and renewable feedstocks.

EUROPE

UK-based chemical petrochemical company Ineos has completed the purchase of TotalEnergies 50pc stake in the former joint venture at the Levera chemical site in southern France with the deal including storage and pipeline assets.

Ineos now completely controls the assets at the former complex including Naphthtachimie, which operated a 720,000 t/

yr ethylene steam cracker at Lavera that can produce 300,000 t/yr of propylene and 120,000 t/yr of BD. The acquisition also included the 300,000 t/yr Appryl polypropylene business and the Gexaro aromatics operations with a capacity of 270,000 t/yr. The Gexaro site will continue to be operated by Petroineos. Naphtha storage business 3TC was included in the deal.

ASIA-PACIFIC

Markets

Asia Pacific butadiene (BD) prices fell for the first time this year, after the restart of CPC's cracker subdued import demand for the synthetic rubber feedstock.

Liquidity decreased significantly with market participants preferring to adopt a wait-and-see stance. Buyers in the region decreased their price targets amid a weakening price environment.

Some 2,000t of BD of European origin due to arrive in Asia Pacific in the first half of June was offered at \$1,500/t cfr, meeting the highest buying interest at mid-\$1,400s/t cfr. Offers of regional cargoes arriving in May were placed at low-\$1,500/t cfr.

Some interests could potentially come from the potential delays in deep-sea cargoes but buying interests among most buyers have dropped to low-to-mid \$1,400s/t cfr.

Sinopec has raised its list price of BD to 11,800 yuan/t, or the import parity equivalence of \$1,415/t, or up by Yn200/t last week. Even so, China still has the lowest BD price in the region. The Chinese are targeting low-to-mid \$1,400/t fob for May-loading BD.

The market is expecting longer supplies of BD, with the potential restart of PrefChem's BD unit in the end of April.

Announcement

All data change announcements can be viewed online at www.argusmedia.com/announcements.

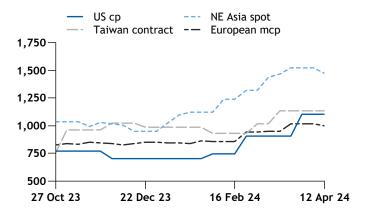
Alternatively, to be added to the email distribution list for all announcements, please email:

datahelp@argusmedia.com.

	Timing	Price	±
Butadiene			
fob NE Asia spot pr	prompt	1,350.00-1,430.00	-50.00
fob NE Asia month average M.	Mar	1,395.00	+223.75
cfr NE Asia spot pr	rompt	1,450.00-1,500.00	-50.00
cfr NE Asia spot month average M.	Mar	1,454.00	+223.00
cfr southeast Asia spot pr	rompt	1,385.00-1,460.00	-80.00
cfr southeast Asia spot month average M.	Mar	1,405.50	+231.00
fob southeast Asia spot pr	rompt	1,340.00-1,400.00	-80.00
fob southeast Asia month average M.	Mar	1,353.00	+229.00
Taiwan contract month	eb	1,132.00-1,134.00	0.00
Sinopec price Yn/t pr	rompt	11,800.00	+200.00
Sinopec price import parity pr	rompt	1,415.00	+24.00
Raffinate-1			
Naphtha cfr Japan premium		180.00-220.00	0
fob Asia		881.00-923.00	-2
cfr China		1,061.00-1,103.00	-2

Butadiene prices: US, WE and Asia-Pacific

\$/t





C4 DERIVATIVES

Americas

Invista is looking to divest the company of its nylon fiber portfolio. The nylon fiber business includes airbag and industrial fibers, the Cordura businesses (fabrics), and five manufacturing centers. Of which, two facilities are US-based in Seaford, Delaware, and Martinsville, Virginia, while the other three are located in Kingston, Canada, Gloucester, UK and QingPu, China.

"If, however, through this process, we find that other companies don't value it more highly, we'll continue to operate the business," Invista chief executive Francis Murphy said on Tuesday.

US prompt styrene monomer (SM) rolled this week, remaining assessed at \$1,515/t based on the last deal done. In production, one SM unit on the US Gulf coast has a line still down. Participants further corroborated that the line will remain offline until the line undergoes scheduled maintenance in April through mid-May.

Another EBSM operator restarted an idled ethylbenzene unit just ahead of schedule on 26 March for supply of EB to octane blenders. A third styrene unit that remained started its turnaround in January has ramped up operating rates at end March and sold some volume. A fourth SM unit is now down for turnaround and is expected to stay offline until end-May, market sources corroborated. Confirmation from the company remained unavailable. A smaller fifth styrene unit initially due to have its scheduled maintenance in third-quarter 2024 may push its maintenance to early 2025.

Europe

The European Tyre and Rubber Manufacturers' Association (ETRMA) has signed the Antwerp Declaration for a European Industrial Deal, aimed at bolstering the region's economic competitiveness. The 10-point declaration addresses weak demand and rising production costs while also pushing for infrastructure investments in a manner that aligns with the EUs climate goals.

"We call on European policymakers to continue to strive for sustainability while maintaining Europe's competitiveness so that the tire and rubber industry can fully contribute to sustainable smart mobility in Europe," Adam McCarthy, ETRMA's secretary general, said on 3 April.

The ETRMA joins over 900 other organizations in becoming signatories of the Antwerp Declaration. Industry leaders across

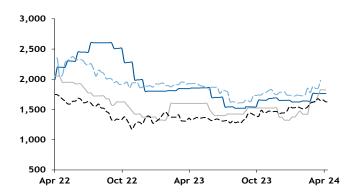
Synthetic rubber general							
	¢/l	¢/lb		/t	\$/t		
	Low	High	Low	High	Low	High	
Americas							
eSBR 1502 US	85.75	91.75	1,777	1,902	1,890	2,023	
eSBR 1712 US	85.45	91.85	1,771	1,904	1,884	2,025	
Polybutadiene US	83.75	88.75	1,736	1,839	1,846	1,957	
Europe							
eSBR 1502 NWE	87.19	89.12	1,807	1,847	1,922	1,965	
eSBR 1712 NWE	83.57	85.98	1,732	1,782	1,842	1,896	
Polybutadiene NWE	85.88	88.30	1,780	1,830	1,893	1,947	
Asia-Pacific							
eSBR 1502 Asia	79.38	83.92	1,634	1,727	1,750	1,850	
eSBR 1712 Asia	74.84	79.38	1,541	1,634	1,650	1,750	
Polybutadiene Asia	79.38	81.65	1,634	1,681	1,750	1,800	

Natural rubber				
	Low	High	Settle	±
TSR20 fob SGX futures \$/t	1,618.00	1,640.00	1,626.00	+1.50

Global SBR 1502 and TSR20 NR prices

\$/t





different sectors, including a consortium of firms in chemicals, metals, mining and more, made clear these priorities at a summit event held last month in Belgium.

Spot styrene prices jumped this week following production disruptions in France, further tightening prompt supply. Demand waned in a heavily backwardated market, capping gains in styrene prices in Europe.

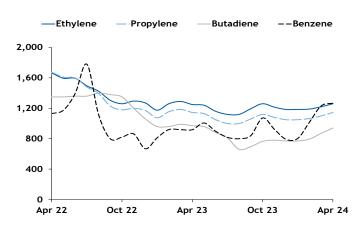
The *Argus* daily front-month assessment breached \$1,700/t for the first time since July 2022, peaking at \$1,825/t before settling at \$1,800/t on 11 April. April cargoes changed hands

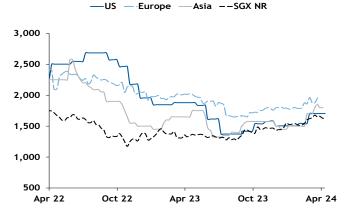
C4 DERIVATIVES





Global SBR \$/t





at \$1,750-1,800/t early in the week. The April-May spread was generally showing a heavy backwardation of \$100-200/t. June offers were showing steep discounts of \$200-300/t to April. Buyers retreated, with discussions becoming broadly notional as the week progressed.

Asia-Pacific

Synthetic rubber prices inched down this week with butadi-

Domestic Chinese synthetic rubber prices inched up, with the futures market. Domestic emulsion styrene butadiene rubber (eSBR) 1502 was priced at 13,400-13,600 yuan/t this week, compared with last week's Yn13,300-13,400/t.

eSBR 1712 was priced at Yn12,500-12,700/t in the domestic Chinese market.

Domestic PBR prices in China likewise went up to Yn13,500-13,700/t, from last week's Yn13,400-13,500/t.

In the futures market in China, BR9000 prices rose to Yn13,495/t on 11 April, from Yn13,430/t on 3 April.

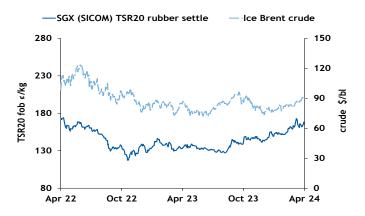
Offers of PBR was placed at \$1,800-1,850/t cif China. Offers of South Korean-origin eSBR 1502 and PBR were placed respectively at \$1,850/t and \$1,900/t cif China.

Natural rubber futures TSR20 likewise rose to \$1,683/t on 9 April, from \$1,628/t the week before.

Natural rubber

TSR20 natural rubber (NR) futures on the SGX settled at \$1,626/t on 12 April, a 2pc decrease from 28 March. Prices

SGX natural rubber vs Ice Brent crude, first month

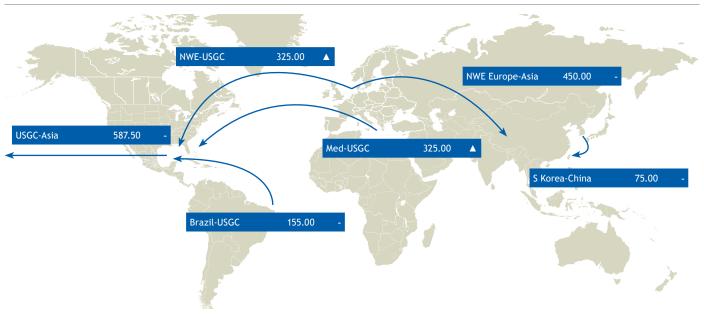


have averaged \$1,644/t for month to date in April, up from the March average of \$1,641/t.

The US Department of Commerce revoked the countervailing duty (CVD) order on rubber band imports from China and the antidumping duty (AD) order on rubber band imports from China and Thailand. No domestic party filed a notice of intent with the US International Trade Commission. As such, the subject reviews were suspended amid failure to prove material injury on US producers of the product.

The AD order on imports from Thailand is set for removal on April 26, 2024. Meanwhile the duty orders on China were already annulled on 19 February 2024.

C4 FREIGHT RATES \$/t



Europe, Mediterranean C	4 exports					
Ship name	BD '000t	CC4 '000t	C4 RAF/IB	Load port	Laycan	Destination
Arctic Gas	5.0			Europe	H1 Jan	USG
Arctic Gas	2.5			Europe	H1 Jan	Mexico
GasChem Arctic	4.7			Europe	H1 Jan	Mexico
Zoe Schulte	7.0			Europe	Mid Jan	Asia
Sophia Kosan		4.2		Turkey	Jan	Europe
Epic Salina		4.2		Turkey	Jan	Europe
Helena Kosan		4.2		Turkey	Jan	Europe
Kaloimnos	4.2			Europe	H1 Feb	US
Kaloimnos	3.0			Europe	H1 Feb	Mexico
Moritz Schulte	4.5			Europe	H1 Feb	US
Epic Susak		4		Turkey	Feb	Europe
Helena Kosan		4		Turkey	Feb	Europe
Epic Shikoku		4		Turkey	H2 Feb	Europe
Epic Sardinia		4		Turkey	H2 Feb	Europe
Paros	5.0			Europe	H1 Mar	Asia
Kamilla Kosan	3.0			Europe	H2 Mar	Mexico
Kamilla Kosan	3.0			Europe	H2 Mar	US
Epic Susak		4		Turkey	H2 Mar	Europe
Trans Catalonia			6.0	Europe	H1 April	Middle East
Gaz Victory	8.5			Europe	Mid April	Asia
Trans Iberia	5.3			Europe	Mid April	US
Trans Iberia	3.0			Europe	Mid April	Mexico
Westminster		4		Turkey	H2 April	Europe
Epic Breeze		4		Turkey	H2 April	Europe
Chelsea		4		Turkey	End April	Europe
Kilburn		4		Turkey	H1 May	Europe
Bering Gas	10.0			Europe	H1 May	Asia
Kamilla Kosan	3.0			Europe	H1 May	US



Europe, Mediterranean C4	exports					
Ship name	BD '000t	CC4 '000t	C4 RAF/IB	Load port	Laycan	Destination
Kamilla Kosan	3.0			Europe	H1 May	Mexico
Trans Catalonia	6.0			Europe	H2 June	Asia
Gaschem Antarctic	3.0			Europe	H1 July	Mexico
Gaschem Antarctic	4.0			Europe	H1 July	US
Stina Kosan		4		Turkey	H1 July	Europe
Epsilongas			3.0	Europe	H2 July	Middle East
Christoph Schulte	5.0			Europe	H2 July	Asia
Alexandra Kosan		4		Turkey	H2 July	Europe
Deltagas	7.5			Europe	End July	Asia
Navigator Gemini	6.0			Europe	July	Asia
Kalolimnos	4.0			Europe	H1 Aug	US
Sophia Kosan		4		Turkey	H1 Aug	Europe
Tessa Kosan			2.0	Europe	H1 Aug	Middle East
Etagas			7.0	Europe	H1 Aug	Middle East
Epic Salina		4		Turkey	H2 Aug	Europe
Happy Candor			5.0	Europe	H2 Aug	Middle East
BWEK Aruba		4		Turkey	H2 Aug	Europe
Kithnos	7.0			Europe	H1 Sep	Asia
Kappagas			3.0	Europe	H1 Sep	Middle East
Epic Bali		4		Turkey	H1 Sep	Europe
BWEK Aruba		4		Turkey	H2 Sep	Europe
Thalea Schulte	7.5			Europe	H2 Sep	Asia
Kamilla Kosan		4		Turkey	H2 Sep	Europe
Arctic Gas	10.0			Europe	H1 Oct	Asia
Epsilongas			3.0	Europe	H1 Oct	Middle East
Sophia Kosan		4		Turkey	H1 Oct	Europe
Kalolimnos			7.0	Europe	H2 Oct	Middle East
BWEK Beauty		4		Turkey	H2 Oct	Europe
Bering Gas	10.0			Europe	H2 Nov	Asia
Zoe Schulte			6.5	Europe	H2 Nov	Middle East
Taugas	7.7			Europe	H2 Nov	Asia
Kamilla Kosan	6.0			Europe	H1 Dec	Asia
Epsilongas			3.2	Europe	H1 Dec	Middle East
Kappagas			3.2	Europe	H1 Dec	Middle East
BWEK Beauty		4		Turkey	H1 Dec	Europe
Antikithira		5.0		Libya	H1 Dec	Asia
Stina Kosan		4		Turkey	H1 Dec	Europe
Chelsea		4		Turkey	H2 Dec	Europe
Celtic Gas	10.0			Europe	H2 Dec	Asia
Stina Kosan		5.0		Libya	H2 Dec	Europe
Stina Kosan			5.0	Europe	H1 Jan	Middle East
Happy Condor			5.0	Europe	H1 Jan	Middle East
Westminster		4.2		Turkey	H1 Jan	Europe
Epic Beata		4.2		Turkey	H1 Jan	Europe
Gaz United			5.0	Europe	End Jan	Middle East
Epic Sardinia		5.0		Turkey	H1 Feb	Europe
Chelsea		4.2		Turkey	H1 Feb	Europe
Stina Kosan			5.7	Europe	Feb	Middle East
Zoe Schulte			6.0	Europe	Feb	Middle East
BWEK Beauty		4.2		Turkey	H2 Feb	Europe
Epic Sardinia		5.0		Libya	H1 Mar	Europe
Total 2024	0.0	26.8	26.7			
Total 2023	168.4	115.0	48.9			
Total 2022	182.6	79.8	13.0			
Total 2021	243.2	30.4	73.2			
Total 2020	356.0	24.0	51			
Total 2019	287.2	127.5	38.6			
Total 2018	290.5	146.5	0.0			



Ship name	BD '000t	CC4 '000t	C4 RAF/IB	Load Port	Laycan	Destinatio
•	5.0			Furana	H1 Jan	U
Arctic Gas Arctic Gas	2.5			Europe	H1 Jan	Mexic
Marie	5.0			Europe S Korea	H1 Jan	Mexic
warie GasChem Arctic	5.0				H1 Jan	Mexic
	5.3			Europe		Mexic
GasChem Caribic				Brazil	End Jan	
Kalolimnos	4.2			Europe	H1 Feb	US
Kalolimnos	3.0			Europe	H1 Feb	Mexic
Moritz Schulte	4.5			Europe	H1 Feb	Ļ
GasChem Atlantic	5.0			Brazil	H2 Feb	. l
GasChem Atlantic	4.0			Brazil	H1 March	Mexic
Syn Antares	5.3			Brazil	H1 March	l
Happy Osprey	5.3			Brazil	H1 March	ι
GasChem Atlantic	4.7			US	H1 March	Mexic
Kamilla Kosan	3.0			Europe	H2 March	Mexic
Kamilla Kosan	5.0			Europe	H2 March	ι
GasChem Caribic	5.0			Brazil	H2 March	Mexic
GasChem Arctic	5.0			Brazil	H1 April	l
Trans Iberia	5.3			Europe	Mid April	ι
Trans Iberia	3.0			Europe	Mid April	Mexic
Kamilla Kosan	3.0			Europe	H1 May	l
Kamilla Kosan	3.0			Europe	H1 May	Mexic
Eco Ice	5.3			Brazil	mid May	ι
Eco Ice	4.0			Brazil	mid May	Mexic
GasChem Caribic	5.0			Brazil	H2 May	Mexic
Trans Iberia	3.0			US	H2 May	Mexic
GasChem Arctic	2.1			US	H2 May	Mexic
GasChem Caribic	5.0			Brazil	H2 June	Mexic
Gaschem Antarctic	3.0			Europe	H1 July	Mexic
Gaschem Antarctic	4.0			Europe	H1 July	l
Happy Peregrine	6.5			US	H1 July	Mexic
GasChem Arctic	5.3			Brazil	H2 July	Mexic
Eco Ice	3.13	3.4		Mexico	H2 July	l
Kirkby		J1	1.7	US	End July	Mexic
Kalolimnos	4.0		1.7	Europe	H1 Aug	l
GasChem Arctic	4.5			US	H1 Aug	Mexic
GasChem Atlantic	4.6			Brazil	H2 Aug	Mexic
GasChem Arctic	2.0			US	H2 Aug	Mexic
GasChem Atlantic	4.3			Brazil	•	Mexic
Kalolimnos	4.0			US	H1 Sep	Mexic
				US	H1 Sep	
GasChem Caribic	3.5				H1 Sep	Mexic
GasChem Arctic	5.3			Brazil	H1 Nov	
GasChem Arctic	5.0			US	H1 Nov	Mexic
GasChem Caribic	5.2			Brazil	H2 Nov	Mexic
GasChem Caribic	5.0			US	H2 Dec	Mexic
GasChem Arctic	2.0			US	H1 Dec	Mexic
GasChem Arctic	5.0			Brazil	H2 Dec	Mexic
GasChem Atlantic	5.2			Brazil	H1 Jan	l
GasChem Arctic	4.0			Brazil	H1 Feb	Mexic
Thekla Schulte	3.5			US	H2 Feb	Mexi
GasChem Arctic	1.0			US	H2 Feb	Mexi
Antikithira	5.3			Brazil	End Feb	Mexi
GasChem Arctic	1.0			US	March	Mexi
otal 2024	20.0	0.0	0.0			
Total 2023	188.7	3.4	1.7			
Total 2022	391.1	5.5	0.0			
Total 2021	331.9	5.3	0.0			
Total 2020	96	0.0	2			
otal 2019	150.2	95.5	13.4			
otal 2018	250.0	134.0	0.0			
with butene-1	230.0	13 1.0	0.0			
*with propylene						



Asia-Pacific C4 imports						
Ship name	BD '000t	CC4 '000t	C4 RAF/IB	Load port	Laycan	Destination
Zoe Schulte	7.0			Europe	Mid Jan	Asia
Paros	7.0			Europe	H1 Mar	Asia
Happy Peregrine	7.0			US	End Mar	Asia
Gaz Victory	10.0			Europe	Mid April	Asi
Ithacki	7.0			Brazil	Mid April	Asi
Bering Gas	10.0			Europe	H1 May	Asi
Trans Catalonia	4.0			Saudi Arabia	Mid-May	Asi
Happy Osprey	7.0			US	end May	Asia
Trans Iberia	6.5			US	H1 June	Asia
Trans Catalonia	6.0			Europe	H2 June	Asia
Happy Peregrine	7.0			US	H1 July	Asia
Deltagas	7.5			Europe	H2 July	Asia
Christoph Schulte	5.0			Europe	H2 July	Asia
Navigator Gemini	2.6			Europe	July	Asia
Seapeak Cathinka	6.0			US	End July	Asia
Navigator Gemini	8.0			US	H1 Aug	Asia
Celtic Gas	11.0			Brazil	H1 Aug	Asia
Happy Albatross	7.0			US	End Aug	Asia
Kithnos	7.0			Europe	H1 Sep	Asia
Thalea Schulte	7.5			Europe	H2 Sep	Asia
Happy Peregrine	7.3			US	H1 Oct	Asi
Arctic Gas	10.0			Europe	H1 Oct	Asi
Deltagas	7.0			Brazil	End Oct	Asi
Taugas	7.7			Europe	H2 Nov	Asia
Ithacki	7.5			US	End Nov	Asia
Bering Gas	13.5			Europe	End Nov	Asi
Kamilla Kosan	6.0			Europe	H1 Dec	Asi
Antikithira	0.0	5.0		Libya	H1 Dec	Asia
Celtic Gas	10.0	5.0		Europe	H2 Dec	Asia
Happy Peregrine	7.5			US	H2 Dec	Asi
Deltagas	7.3			US	Mid Feb	Asi
Total 2024	7.3	0.0	0.0	03	mid I CD	Asir
Total 2023	216.6	5.0	0.0			
Total 2022	63.9	7.2	15.0			
Total 2021	111.5	44.0	0.0			
Total 2020	501	12	9.0			
Total 2019	470.4	88.2	6.5			
Total 2018	331.5	43.5	0.0			

Zetagas 4.1 USG H1 Jan Europ Balearic Gas 7.0 US H1 Feb Europ Kamilla Kosan 6.0 US H1 Feb Europ Moritz Schulte 4.5 US H1 Mar Europ GasChem Atlantic 4.7 US H1 Mar Mexic Happy Peregrine 7.1 US End Mar As GasChem Adriatic 2 US End Mar Mexic GasChem Adriatic 2 US End Mar Mexic GasChem Adriatic 2 US End Mar Mexic GasChem Arctic 2.1 US H2 May Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As GasChem Arctic 4.5 US H1 July	US butadiene expo	rts					
Balearic Gas 7.0 US H1 Feb Europ Kamilla Kosan 6.0 US H1 Feb Europ Moritz Schulte 4.5 US H1 Mar Europ GasChem Atlantic 4.7 US H1 Mar Mexic Happy Peregrine 7.1 US End Mar As GasChem Adriatic 2 US End Mar Mexic Trans Iberia 3.0 US H2 May Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H1 June As Happy Peregrine 7.0 US H1 June As Kirkby 1.6 US End July As Kirkby 1.6 US End July Mexic GasChem Arctic 4.5 US H1 Aug As GasChem Arctic 2.0 US H1 Aug As	Ship name					Laycan	Destination
Kamilla Kosan 6.0 US H1 Feb Europ Moritz Schulte 4.5 US H1 Mar Europ GasChem Atlantic 4.7 US H1 Mar Mexic Happy Peregrine 7.1 US End Mar As GasChem Adriatic 2 US End Mar Mexic GasChem Arctic 2.1 US H2 May Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H1 June As Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July As Kirkby 1.6 US End July Mexic GasChem Arctic 4.5 US H1 Aug Mexic GasChem Arctic 2.0 US H1 Aug Mexic GasChem Caribic 3.5 US H1 Oct	Zetagas		4.1		USG	H1 Jan	Europe
Moritz Schulte 4.5 US H1 Mar Europ GasChem Atlantic 4.7 US H1 Mar Mexic Happy Peregrine 7.1 US End Mar As GasChem Adriatic 2 US End Mar Mexic GasChem Arctic 2.1 US H2 May Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H2 June Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July Mexic GasChem Arctic 4.5 US H1 Aug As Kirkby 1.6 US H1 Aug As Kirkby 1.6 US H1 Aug As	Balearic Gas		7.0		US	H1 Feb	Europe
GasChem Atlantic 4.7 US H1 Mar Mexic Happy Peregrine 7.1 US End Mar As GasChem Adriatic 2 US End Mar Mexic Trans Iberia 3.0 US H2 May Mexic GasChem Arctic 2.1 US H2 May Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July Mexic Happy Peregrine 6.0 US H1 Aug As Kirkby 1.6 US End July Mexic Happy Albatross 7.3 US H1 Aug Mexic Happy Albatross 7.3 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep	Kamilla Kosan		6.0		US	H1 Feb	Europe
Happy Peregrine 7.1 US End Mar As GasChem Adriatic 2 US End Mar Mexic Trans Iberia 3.0 US H2 May Mexic GasChem Arctic 2.1 US H2 May Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July Mexic Kirkby 1.6 US End July Mexic Navigator Gemini 6.0 US H1 Aug As GasChem Arctic 4.5 US H1 Aug Mexic Gaschem Arctic 2.0 US H2 Aug Mexic Happy Peregrine 7.3 US H1 Sep Mexic Happy Peregrine 7.3 US H1 Nov	Moritz Schulte		4.5		US	H1 Mar	Europe
GasChem Adriatic 2 US End Mar Mexic Trans Iberia 3.0 US H2 May Mexic GasChem Arctic 2.1 US H2 May Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July As Kirkby 1.6 US End July As Kirkby </td <td>GasChem Atlantic</td> <td>4.7</td> <td></td> <td></td> <td>US</td> <td>H1 Mar</td> <td>Mexico</td>	GasChem Atlantic	4.7			US	H1 Mar	Mexico
Trans Iberia 3.0 US H2 May Mexic GasChem Arctic 2.1 US H2 May Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July As Kirkby 1.6 US End July Mexic Navigator Gemini 6.0 US H1 Aug As GasChem Arctic 4.5 US H1 Aug Mexic GasChem Arctic 2.0 US H2 Aug Mexic Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Nov Mexic Happy Peregrine 7.3 US H1 Nov <t< td=""><td>Happy Peregrine</td><td></td><td>7.1</td><td></td><td>US</td><td>End Mar</td><td>Asia</td></t<>	Happy Peregrine		7.1		US	End Mar	Asia
GasChem Arctic 2.1 US H2 May Mexic Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July Mexic Kirkby 1.6 US End July Mexic Navigator Gemini 6.0 US H1 Aug As GasChem Arctic 4.5 US H1 Aug Mexic GasChem Arctic 2.0 US H2 Aug Mexic Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Oct As GasChem Arctic 5.0 US H1 Nov Mexic GasChem Arctic 2.0 US H2 Dec <	GasChem Adriatic			2	US	End Mar	Mexico
Happy Osprey 7.0 US end May As Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July As Kirkby 1.6 US End July Mexic Navigator Gemini 6.0 US H1 Aug As GasChem Arctic 4.5 US H1 Aug Mexic Gaschem Arctic 2.0 US H2 Aug Mexic Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep Mexic Happy Peregrine 7.3 US H1 Nov Mexic GasChem Arctic 2.0 US H1 Nov As GasChem Arctic 2.0 US H1 Dec Mexic Happy Peregrine 7.3 US H2 Dec Mexic Marie #1 4.0 US End Jan Mexic	Trans Iberia	3.0			US	H2 May	Mexico
Trans Iberia 6.5 US H1 June As Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July Mexic Kirkby 1.6 US End July Mexic Navigator Gemini 6.0 US H1 Aug As GasChem Arctic 4.5 US H1 Aug Mexic GasChem Arctic 2.0 US H2 Aug Mexic Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep Mexic Happy Peregrine 7.3 US H1 Nov Mexic GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec	GasChem Arctic	2.1			US	H2 May	Mexico
Happy Peregrine 6.5 US H2 June Mexic Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July As Kirkby 1.6 US End July Mexic Navigator Gemini 6.0 US H1 Aug As GasChem Arctic 4.5 US H1 Aug Mexic GasChem Arctic 2.0 US H2 Aug Mexic Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep Mexic GasChem Arctic 5.0 US H1 Nov Mexic GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec Mexic Marie #1 4.0 US End Jan	Happy Osprey	7.0			US	end May	Asia
Happy Peregrine 7.0 US H1 July As Seapeak Cathinka 3.7 US End July As Kirkby 1.6 US End July Mexic Navigator Gemini 6.0 US H1 Aug As GasChem Arctic 4.5 US H1 Aug Mexic Gaschem Arctic 2.0 US H2 Aug Mexic Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep Mexic GasChem Arctic 5.0 US H1 Nov Mexic GasChem Arctic 2.0 US H1 Nov As GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec Mexic Marie #1 4.0 US End Jan <	Trans Iberia	6.5			US	H1 June	Asia
Seapeak Cathinka 3.7 US End July As Kirkby 1.6 US End July Mexic Navigator Gemini 6.0 US H1 Aug As GasChem Arctic 4.5 US H1 Aug Mexic Gaschem Arctic 2.0 US H2 Aug Mexic Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep Mexic Happy Peregrine 7.3 US H1 Nov Mexic GasChem Arctic 5.0 US H1 Nov As GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec Mexic Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As <td>Happy Peregrine</td> <td>6.5</td> <td></td> <td></td> <td>US</td> <td>H2 June</td> <td>Mexico</td>	Happy Peregrine	6.5			US	H2 June	Mexico
Kirkby 1.6 US End July Mexic Navigator Gemini 6.0 US H1 Aug As GasChem Arctic 4.5 US H1 Aug Mexic Gaschem Arctic 2.0 US H2 Aug Mexic Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep Mexic Happy Peregrine 7.3 US H1 Oct As GasChem Arctic 5.0 US H1 Nov Mexic GasChem Arctic 2.0 US H1 Dec Mexic GasChem Arctic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US H2 Feb Mexic	Happy Peregrine	7.0			US	H1 July	Asia
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Gaschem Arctic 2.0 US H2 Aug Mexic Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep Mexic Happy Peregrine 7.3 US H1 Oct As GasChem Arctic 5.0 US H1 Nov Mexic Ithacki 7.5 US End Nov As GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic	Navigator Gemini	6.0			US	H1 Aug	Asia
Happy Albatross 7.3 US End Aug As Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep Mexic Happy Peregrine 7.3 US H1 Oct As GasChem Arctic 5.0 US H1 Nov Mexic Ithacki 7.5 US End Nov As GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 US <td< td=""><td>GasChem Arctic</td><td>4.5</td><td></td><td></td><td>US</td><td>H1 Aug</td><td>Mexico</td></td<>	GasChem Arctic	4.5			US	H1 Aug	Mexico
Kalolimnos 4.0 US H1 Sep Mexic GasChem Caribic 3.5 US H1 Sep Mexic Happy Peregrine 7.3 US H1 Oct As GasChem Arctic 5.0 US H1 Nov Mexic Ithacki 7.5 US End Nov As GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 Total 2023 101.9 28.7 3.2 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0	Gaschem Arctic	2.0			US	H2 Aug	Mexico
GasChem Caribic 3.5 US H1 Sep Mexic Happy Peregrine 7.3 US H1 Oct As GasChem Arctic 5.0 US H1 Nov Mexic Ithacki 7.5 US End Nov As GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 US H2 Feb Mexic Total 2023 101.9 28.7 3.2 Total 2020 73.5 40.7 1.7 Total 2020	Happy Albatross	7.3			US	End Aug	Asia
Happy Peregrine 7.3 US H1 Oct As GasChem Arctic 5.0 US H1 Nov Mexic Ithacki 7.5 US End Nov As GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 US H2 Feb Mexic Total 2023 101.9 28.7 3.2 US H2 Feb Mexic Total 2021 8.0 25.2 6.6 6.6 Contal 2020 68.3 0.	Kalolimnos	4.0			US	H1 Sep	Mexico
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Ithacki 7.5 US End Nov As GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 US H2 Feb Mexic Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2020 68.3 0.0 0.0 Total 2021 48.5 3.5 0.0 0.0 Total 2021 48.5	Happy Peregrine	7.3			US	H1 Oct	Asia
GasChem Arctic 2.0 US H1 Dec Mexic GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 US H2 Feb Mexic Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2020 68.3 0.0 0.0 Total 2021 3.5 0.0 0.0 Total 2021 48.5 3.5 0.0 0.0 Total 2021 3.5 0.0 0.0	GasChem Arctic	5.0			US	H1 Nov	Mexico
GasChem Caribic 5.0 US H2 Dec Mexic Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 US H2 Feb Mexic Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2020 48.5 3.5 0.0 US H2 Feb Mexic	Ithacki	7.5			US	End Nov	Asia
Happy Peregrine 7.3 US H2 Dec As Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	GasChem Arctic	2.0			US	H1 Dec	Mexico
Marie #1 4.0 US End Jan Mexic Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	GasChem Caribic	5.0			US	H2 Dec	Mexico
Marie #2 3.3 US End Jan Mexic Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	Happy Peregrine	7.3			US	H2 Dec	Asia
Deltagas 7.3 US Mid Feb As Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0	Marie #1	4.0			US	End Jan	Mexico
Thekla Schulte 3.5 US H2 Feb Mexic GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	Marie #2	3.3			US	End Jan	Mexico
GasChem Arctic 1.0 US H2 Feb Mexic Total 2024 19.1 0.0 0.0 Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	Deltagas	7.3			US	Mid Feb	Asia
Total 2024 19.1 0.0 0.0 Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	Thekla Schulte	3.5			US	H2 Feb	Mexico
Total 2023 101.9 28.7 3.2 Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	GasChem Arctic	1.0			US	H2 Feb	Mexico
Total 2022 73.5 40.7 1.7 Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	Total 2024	19.1	0.0	0.0			
Total 2021 8.0 25.2 6.6 Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	Total 2023	101.9	28.7	3.2			
Total 2020 68.3 0.0 0.0 Total 2019 48.5 3.5 0.0	Total 2022	73.5	40.7	1.7			
Total 2019 48.5 3.5 0.0	Total 2021	8.0	25.2	6.6			
	Total 2020	68.3	0.0	0.0			
	Total 2019	48.5	3.5	0.0			
Total 2018 48.0 0.0 0.0	Total 2018	48.0	0.0	0.0			

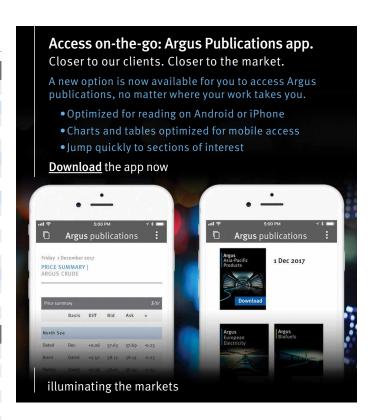
Asia-Pacific C4 exports					
Ship Name	BD '000t	CC4 '000t	Load port	Laycan	Destination
Seapeak Camilla		3.0	Singapore	Feb	Middle East
Total 2024	0.0	3.0			
Marie	5.0		S. Korea	H1 Jan	US
Gas Exelero	2.1		Taiwan	H2 Mar	Europe
Total 2023	7.1	0.0			
Kalolimnos	7.6		S. Korea	Mid Jan	Mexico, USGC
Penelope M	5.5		S. Korea	mid Feb	USGC
Gaschem Arctic	5.0		S. Korea	Early Mar	USGC
Marie	5.0		S. Korea	Mid Mar	USGC
Clipper Hermes	4.5		Thailand	End Mar	USG
Fortunato	5.0		S. Korea	Early Apr	USG
DL Poppy		2.0	Asia	End Mar	Middle East
Sabrina	2.9		Indonesia	H1 April	India
Kamilla Kosan	5.0		S. Korea	mid Aug	US
Total 2022	40.5	2.0			
Coral Furcata	5.0		S. Korea	Ely June	USGC
Navigator Umbrio	5.0		China	H1 June	Mexico
Navigator Europa	5.0		S. Korea	mid-July	USG
Thekla Schulte	4.0		Thailand	H1 Aug	USG
Napa Spirit	6.0		S. Korea	H2 Aug	USG
Pacific Venus	6.0		S. Korea	End Aug	USGC, Mexico
JBU Schelde	6.0		S. Korea	End Aug	USG
Kamilla Kosan	6		S. Korea	H1 Sept	USG
Happy Bird	5		S. Korea	Mid Oct	USG
Total 2021	47.1	0.0			
L Kosan	5.0		S. Korea	Mid Mar	USGC
Sonoma Spirit	5.0		S. Korea	Mid Mar	USGC
Total 2020	10.0	0.0			
Navigator Centauri		6.0	Philippines	Jun	USGC
Total 2019	0.0	6.0			
Penelope M	5.0		S. Korea	1H May	USGC
PGC Eirini	5.0		Singapore	1H May	USGC
Norgas Shasta		6.0	S. Korea	End Aug	USGC
Total 2018	10.0	6.0			



FREIGHT

Cargo bookings to North America					
	Jan 24	Feb 24	Mar 24		
Ex-Europe					
Butadiene	0	0	0		
Crude C4	0	0	0		
C4 raffinate	0	0	0		
Ex-Asia					
Butadiene	0	0	0		
Crude C4	0	0	0		
Ex-Rest of World					
Butadiene Brazil	5	9	0		
Crude C4 Mexico	0	0	0		
Crude C4 Turkey	0	0	0		
Crude C4 Brazil	0	0	0		
Butadiene Other	0	4	0		
Totals					
Butadiene	5	14	0		
Crude C4	0	0	0		
C4 raffinate	0	0	0		

Freight rates		\$/t
	Rate	±
C4 freight NWE - USGC	325.00	+50.00
C4 freight Med - USGC	325.00	+50.00
C4 freight Brazil - USGC	155.00	0.00
C4 freight USGC - Asia	587.50	0.00
C4 freight NWE Europe - Asia	450.00	0.00
C4 freight S Korea - Taiwan	75.00	0.00





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